UNEP/SETAC LIFE CYCLE INITIATIVE • CORNER

New activities launched in Warsaw and consultations on emerging ideas

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1 Key activities in Warsaw

In conjunction with the 18th SETAC Europe meeting in Warsaw (25–29 May, 2008), three sessions of the UNEP/SETAC Life Cycle Initiative were held on 27th and the 13th meeting of the International Life Cycle Panel (ILCP) took place on the and 29th. The first meeting of the Life Cycle Initiative covered the Evolution of Life Cycle Thinking worldwide, new projects launched and ideas for projects in the Work Areas of Life Cycle Approaches for Consumption

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A. A. Jensen FORCE Technology, Park Alle 345, 2605 Brøndby, Denmark surveys sent out to national contacts, the Life Cycle Initiative has developed a world map showing implementation levels of life cycle approaches across the globe. We have developed five levels (from 0 to 4) representing different stages of implementation. Level 0 corresponds to countries just beginning to implement life cycle thinking on a small scale. Level 1 refers to countries with limited experience and no life cycle based regulation. Level 2 is for countries that have established national life cycle networks and are moving towards life cycle databases and regulation. Level 3 is for countries that have

LCA databases and limited regulation based on LCA. Level 4

Based on feedback received from our partners and recent

Clusters and Resources and Materials. It was followed by an invitation to interested experts to join current and new projects. Afterwards, expert groups met to discuss the next steps for the Work Area on Life Cycle Management for Business and of the Database Registry project. These steps are explained in more detail in the following paragraphs.

The ILCP strongly endorsed the USEtox Model and recognized the need to support (a) the further development of the model, (b) the ongoing peer-review/model evaluation process, and (c) the model distribution. Additionally, the ILCP observed an emerging global interest in Life Cycle Impact Assessment processes including the identification of needs, the review of deliverables and the endorsement of results. UNEP has indicated its willingness to explore how to facilitate discussions on this issue. Finally, the ILCP introduced two new acting Work Area Chairs: Andreas Ciroth for the Work Area on Life Cycle Approaches Methodologies and Rolf Frischknecht for the Work Area on Life Cycle Approaches for Resources and Materials. Allan A. Jensen currently chairs the Work Area on Life Cycle Management for Business and Industry and James Fava is the acting Chair of the Work Area on Life Cycle Approaches for Consumption Clusters.

for countries have both databases and regulation and are at the forefront of implementation. Even in Level 4 countries, however, there is still room for growth and continual improvement.

2 Five new activities

The 'Assessment of Use and Depletion of Water Resources within the LCA Framework' project is led by the Institute of Environmental Engineering, ETH Zurich (Switzerland) and Véolia Environnement (France). The project aims to improve the assessment of freshwater use and consumption in the framework of Life Cycle Assessment. It focuses on establishing recommended practice, guidance and methods for assessing freshwater resource usage and depletion.

The project on 'Life Cycle Assessment in Developing Countries and Governance in Global Value Chains' is coordinated by the Technical University of Denmark. The project focuses on Asia and Pacific region, in particular, Vietnam and Malaysia. This project seeks to gain scientific and practical knowledge on applying Life Cycle Assessment (LCA) tools in developing countries, enhancing capacities, evaluating the use of LCA tools in connection of environmental standards, and upgrading products within global value chains.

'Capacity Building on the use of LCA for Sustainable Consumption in Africa' is led by the Steering Committee of the African Life Cycle Assessment Network and the African Roundtable on Sustainable Consumption and Production (ARSCP). The main objective is to increase awareness and to train ARSCP members in the application of the LCA tools to identify priority consumption clusters in Africa.

'Operational Characterization Factors for Land use Impacts on Biodiversity and Ecosystem Services in the Life Cycle Impact Assessment' is another project managed by the Swiss Federal Institute of Technology (ETHZ). The goal of this project is to provide a life cycle impact assessment methodology that includes an operational set of characterization factors linking land use elementary flows (occupation and transformation) to impacts on biodiversity and services provided by terrestrial ecosystem.

'Development of USEtox Model's Documentation' is a project that aims to explain the major algorithms used in the model and the process used to obtain the landscape, chemical properties, and toxicity inputs.

3 Further steps of the work area on life cycle approaches for business and the database registry project

The aim of the session on 'Life Cycle Management—what works and what does not' was to inform the participants about ongoing and future projects and partnerships. A partnership

with World Business Council for Sustainable Development (WBCSD) has been established named 'Sustainable Value Chain Initiative' with three work streams (Integration of Life Cycle-Thinking in Business Processes, Communication and Facilitation of tools for quick effective implementation including a capacity maturity model). The WBCSD Initiative is open to WBCSD members and all interested parties. An issue brief with examples of good practice and a capability maturity model will be published. WBCSD is already in cooperation with World Resource Institute (WRI) and together they have developed a greenhouse gas (GHG) protocol for GHG accounting inside a business. This guideline will be expanded by June 2009 to include the entire life cycle/value chain of products, and it was recommended that UNEP/SETAC participates in the development of a sound standard on GHG accounting based on UNEP and SETAC's over-all experience in life cycle approaches.

The aims of the session on the Database Registry project were to provide to key stakeholders with an update on the current status of the UNEP/SETAC Database Registry and to get feedback on how to best refine the goal and scope of the project in order to move ahead towards the completion of a useful registry for the world community. The acting Chair of the Work Area on Life Cycle Approaches for Methodologies, Andreas Ciroth, explained that the project's aim is to improve user access worldwide to available life cycle data and facilitate database and software providers the access to users and user needs. Ciroth envisages that in the end, the Database Registry could become a global marketplace for life cycle inventory data. The need to understand 'current' users' needs before redefining the scope and goal was discussed. As next steps, a global survey to better understand current users' expectations will be launched in July. Once available, results of the survey will be made publicly available.

4 Emerging ideas in the UNEP/SETAC Life Cycle Initiative and invitation to join the initial activities

'Green Product Standard—principles and criteria' is a topic that the UNEP/SETAC Life Cycle Initiative would like to further develop. There is a growing interest within the business to consumer, business to government and business to business markets in purchasing products and services with smaller environmental footprints. At the same time, 'green' product labelling schemes and standards to certify products which meet certain environmental attributes are developing rapidly. While this may seem a positive market transformation; the negative side is that the existence of various 'green' product standards and labelling systems is creating confusion in the marketplace. During a meeting in November 2007 hosted by US EPA in USA (Chicago), over 75 representatives of business, NGO, governments, labelling organizations, consulting firms met to discuss 'green' products. One of the



outcomes was an interest to identify an overriding umbrella organization to allow 'green product standards' to be developed, monitored, and implemented. The UNEP/SETAC Life Cycle Initiative was considered as potential convening organization because it is a unique global group with access to both government representatives and scientific groups.

The 'Life Cycle Business Education Forum' aims to promote life cycle knowledge and thinking within business education programs around the world, particularly at the Masters of Business Administration (MBA) level. The target audience will be potential business leaders and decision makers of the future. Creating a 'Life Cycle Business Education Forum' will ensure that leading business educators have the knowledge of and access to relevant life cycle information to allow them to develop relevant course offerings on life cycle thinking and approaches. Initiative soundings among several leading U.S. graduate business schools and business programs from various non-OECD countries have been encouraging.

5 Forthcoming meetings until January 2009

 5th SETAC World Congress, Sydney, Australia, 3–7 August 2008.

- The Project Group on Social LCA is finalizing a Code of Practice and the international review process will be launched in July. A further meeting to incorporate feedback received will be held on 25 and 26 September in Vienna (UNIDO).
- Confirmed National conferences will take place in Mexico (4th Eco-efficiency forum. LCM in the Oil Industry in Latin America) and Brazil (1st Brazilian LCM Conference on 29 to 31 October). Dates for two conferences (Life Cycle Management in China and Capacity Building for the African Roundtable on Sustainable Consumption and Production (ARSCP) on the use of LCA for Sustainable Consumption in Africa) are to be confirmed yet.
- SETAC North America 29th Annual Meeting, Tampa, Florida, 16–20 November 2008
- The Eight International Conference on EcoBalance, Tokyo, 10–12 December 2008
- Various Project Groups are organizing meetings back to back the SETAC LCA Case Study Symposium in January (22–23 January 2008) in Paris.

For more information on the topics presented above, please visit the website of the UNEP/SETAC Life Cycle Initiative at http://lcinitiative.unep.fr/ or write to sc@unep.fr.

